

## Process of manufacturing porous separator for electrochemical power supply

**Publication number:** EP0814520 (A2)

**Publication date:** 1997-12-29

**Inventor(s):** DELNICK FRANK M DR [US]

**Applicant(s):** IMRA AMERICA INC [US]

**Classification:**

- **international:** B32B5/32; C25B9/10; H01G9/02; H01M2/16; H01M2/18; H01M10/04; H01M2/14; H01M6/16; B32B5/22; C25B9/06; H01G9/02; H01M2/14; H01M2/16; H01M10/04; H01M6/16; (IPC1-7): H01M2/14

- **European:** C25B9/10; H01G9/02; H01M2/16E; H01M10/04F

**Application number:** EP19970108800 19970602

**Priority number(s):** US19960767468 19960619

**Also published as:**

EP0814520 (A3)

US5948464 (A)

JP10106530 (A)

**Cited documents:**

WO9311571 (A1)

EP0730316 (A1)

WO9323886 (A1)

### Abstract of EP 0814520 (A2)

A method of forming a porous composite separator layer for an electrochemical cell comprising the steps of printing a thin layer of a separator precursor solution on the surface of one of the electrochemical cell electrodes, drying and curing the thin layer of separator precursor solution so that it transforms into a microporous composite separator structure. In the preferred embodiment, the separator precursor solution is formulated as an ink comprising a silica aerogel filler material dispersed in a solution of polymer binder which is dissolved in a suitable solvent. The process allows the manufacture of thin and flexible composite separators which are conformally bonded to the underlying electrodes.

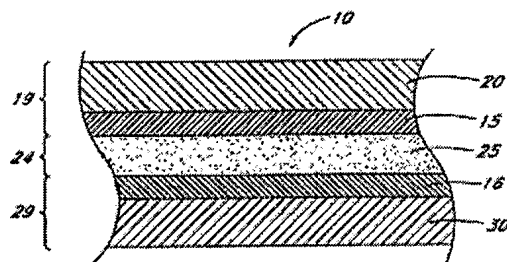


Fig. 1

Data supplied from the esp@cenet database — Worldwide